

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 77-56

WASTEWATER RECLAMATION REQUIREMENTS FOR  
NAPA SANITATION DISTRICT,  
BUENA VISTA WINERY, INC.,  
MR. IRA LEE,  
MR. THOMAS NAUCKE,  
MR. JOHN BOLTON, VISTA DE LOS VINEDOS,  
MS. RENE DE ROSA, WINERY LAKE,  
MR. ROBERT THULANDER,  
NAPA AND SONOMA COUNTIES

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter called the Board, finds that:

1. The Napa Sanitation District, hereinafter referred to as the Discharger, together with the other parties named above, hereinafter referred to as users, have submitted a Report of Waste Discharge.
2. The Discharger proposes to divert up to 64,000 gallons per day of treated municipal wastewater from its wastewater treatment ponds for irrigation of the following properties:

| <u>Property</u>      | <u>Crop</u> | <u>Acreage</u> | <u>County</u>    | <u>Quantity (Gallons/Day)</u> |
|----------------------|-------------|----------------|------------------|-------------------------------|
| Lee Vineyard         | grapes      | 24             | Napa             | 3,000                         |
| Vista de los Vinedos | grapes      | 55             | Napa             | 4,000                         |
| Naucke Vineyard      | grapes      | 20             | Napa             | 1,000                         |
| Buena Vista Winery   | grapes      | 600            | Napa &<br>Sonoma | 50,000                        |
| Winery Lake          | grapes      | 175            | Napa             | 50,000                        |
| Mr. Thulander        | Xmas trees  | 4              | Napa             | 6,000                         |
|                      | pears       | 10             | Napa             |                               |

3. Mr. Thulander will flood irrigate, while the other users will use drip irrigation. It is proposed to construct a pipeline across the Napa River at which point tanker trucks will deliver reclaimed wastewater to irrigation reservoirs at each site. Until the pipeline is completed reclaimed wastewater will be picked up by truck at the discharger's wastewater treatment ponds.
4. Section 13532 of the California Water Code provides that a regional board, after consulting with and receiving the recommendations of the State Department of Public Health, and if it determines such action to be necessary to protect the public health, safety, or welfare, shall prescribe water reclamation requirements for water which is used or proposed to be used as reclaimed water. The use of reclaimed water for the purposes specified in Paragraph 2 could affect the public health, safety, or welfare, and requirements for those uses are therefore necessary in accordance with the Water Code.
5. The Board adopted a Water Quality Control Plan for the San Francisco Bay Basin in April 1975. The water quality objectives for reclaimed wastewater, as set forth in the Basin Plan specify those limits prescribed in Title 17, Section 8025 through Section 8050, California Administrative Code. These objectives have been superceded by Title 22, Section 60501 - 60357, California Administrative Code (Statewide Reclamation Criteria).
6. The wastewater reclamation requirements are in conformance with the statewide reclamation criteria established by the State Department of Health and are in conformance with the Policy and Action Plan for Water Reclamation adopted by the State Water Resources Control Board in January 1977.
7. The proposed use of reclaimed wastewater involves a minor alteration to land and as such is exempt from the provisions of the Environmental Quality Act of 1970 as a Class 4 exemption pursuant to Section 15104 of the California Administrative Code (State EIR Guidelines). The project will not have a significant effect on the environment.
8. This Regional Board has notified the discharger, and interested agencies and persons of its intent to prescribe wastewater reclamation requirements for the proposed uses.
9. This Board at a public meeting heard and considered all comments pertaining to this reuse.

IT IS HEREBY ORDERED, that the discharger and all users named in this Order, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Reclaimed Wastewater Use Specifications

1. The treatment distribution or reuse of reclaimed water shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
2. The reclaimed wastewater shall be at all times an adequately disinfected, oxidized water and shall meet the following quality limits at all times:

|                    |  |
|--------------------|--|
| BOD                | 60 mg/l maximum  |
| DO                 | 1.0 mg/l minimum   |
| Dissolved Sulfide  | 0.1 mg/l maximum   |
| Coliform Organisms | Total coliform bacteria median shall not exceed 240 MPN/100 ml and shall not exceed 10,000 MPN/100 ml at any time. The median value shall be determined from the bacteriological results of the last 7 days for which analysis has been completed. |

Reclamation shall cease whenever the above limitations have been violated.

3. For use on vineyards, reclaimed wastewater shall be used only for drip irrigation. No grapes which are to be harvested may come in contact with the irrigating water or the ground. Wastewater may not be sprayed for frost control.
4. For use on pear orchards, reclaimed wastewater may be flood irrigated. No fruit which is to be harvested may come in contact with the irrigating water or the ground.
5. For use on Christmas trees, reclaimed wastewater may be flood irrigated. Irrigation with wastewater must cease 60 days prior to the general public being allowed on the property.
6. The property boundary, storage reservoirs, and all equipment including pumps, piping and valves, trucks, etc., which contain reclaimed wastewater shall be adequately and clearly identified with warning signs. The discharger and users shall make all necessary provisions in addition to inform the public that the liquid contained therein is sewage and is unfit for human consumption. Workers must be informed that a health risk does exist with the use of reclaimed water and that contact with it should be minimized.
7. Water wells may be no closer than 100 feet from irrigated areas.
8. For the control of emergent vegetation and maintenance of mosquito fish, a minimum depth of 1.5 feet shall be maintained in irrigation storage reservoirs. If less than 1.5 feet exists at any time or mosquito fish are not present, the Napa Mosquito Abatement District must be notified.
9. Reclaimed wastewater shall be applied at such times as will minimize public exposure.

B. Reclaimed Wastewater Use Prohibitions

1. No wastewater shall be applied to the use areas during periods of rainfall or when soils are saturated.
2. No reclaimed wastewater used for irrigation shall be allowed to escape the specified use areas, either by surface flow or airborne spray.
3. Ponding shall not occur except for minor amounts incidental to careful irrigation practice. Water shall not be left standing for more than seven days.
4. Reclaimed wastewater shall not be injected into any fixed irrigation system connected to domestic water supply.
5. Use of reclaimed wastewater on areas not specified in this Order is prohibited without written authorization from the Executive Officer.

C. Provisions

1. This Order includes items numbered 1 through 8 of the attached "Standard Provisions for the Use of Reclaimed Water" dated March 15, 1973. The Term "user" shall be replaced with "discharger and/or users".
2. The Executive Officer may withdraw authorization for specific uses in the event that the terms and conditions of this Order are violated in such uses.
3. The discharger and users shall take all measures necessary to minimize public contact with reclaimed wastewater.
4. No reclaimed wastewater to be applied for the uses specified in this Order shall be dechlorinated.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on May 17, 1977.

FRED H. DIERKER  
Executive Officer

Attachments:

"Standard Provisions for the Use of  
Reclaimed Wastewater" dated 3/15/73  
Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

MARCH 15, 1973

STANDARD PROVISIONS  
FOR THE USE OF  
RECLAIMED WATER

1. This Board requests the user to take note of the comments and recommendations contained in all the correspondence the Board has received and considered concerning this matter, and the Executive Officer is directed to transmit copies of that correspondence to the user.
2. This Board considers "Waters of the State" as defined in Section 13050(e) of the California Water Code to include wastewaters over which the user has lost control.
3. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the user from his liabilities under Federal, State, or local laws, nor guarantee the user a capacity right in the receiving waters.
4. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.
5. The user shall file with the regional board technical reports on self-monitoring work performed according to detailed specifications as directed by the Executive Officer.
6. The user shall permit the Regional Board or its authorized representative:
  - a. Entry upon premises in which an effluent source is located or in which any required records are kept.
  - b. Access to copy any records required to be kept under terms and conditions of this order.
  - c. Inspection of any monitoring equipment or method required by this order.
  - d. Sampling of any discharge.
7. The user shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the user to achieve compliance with the water reclamation requirements.
8. The user shall file with the regional board a report on waste discharge at least 180 days before making any material change or proposed change in the character, location or volume of reuse.

SELF-MONITORING PROGRAM  
FOR  
NAPA SANITATION DISTRICT  
AND  
USERS IDENTIFIED IN ORDER NO. 77-56

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principal purposes of a monitoring program by a waste discharger, also referred to as self-monitoring program, are: (1) to document compliance with waste discharge requirements and prohibitions established by this Regional Board, (2) to facilitate self-policing of the waste discharge, (3) to develop or assist in the development of effluent or other limitations, discharge prohibitions, national standards of performance, pre-treatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.

B. Monitoring Program

1. Schedule for sampling, and analyses of effluent shall be performed as shown on Table 1.
2. Weekly the user of reclaimed wastewater shall inspect the following:
  - a) Presence of odors as a result of spray application of wastewater, noting the presence or absence, character, source, and distance and direction of travel.
  - b) Evidence of any ponded water due to spray application or runoff of reclaimed wastewater outside the property.

C. Reports to be Filed with the Regional Board

1. Violations of Requirements

In the event the discharger is unable to comply with the conditions of the waste discharge requirements and prohibitions due to:

- a) Maintenance work, power failure, or breakdown of units, treatment equipment, or
- b) Accidents caused such as acts of nature

The discharger shall notify the Regional Board and the County Health Department office by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written report shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to prevent the problem from recurring.

2. Regular Self-Monitoring Reports shall be sent to the Regional Board monthly. The attached monitoring summary report form shall be used and submitted to both the Regional Board and County Health Department.

I, Fred H. Dierker, Executive Officer, do hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 77-56.
2. Has been ordered by the Executive Officer on May 17, 1977, and becomes effective immediately.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions will be ordered by the Executive Officer.

FRED H. DIERKER  
Executive Officer

Attachments:

Table 1  
Monitoring Summary

TABLE I  
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSES  
Napa Sanitation District

| SAMPLING STATIONS                            | E-001<br>thru<br>E-00'n'           |  |  |  |  |  |  |  |  |
|--|------------------------------------|--|--|--|--|--|--|--|--|
| TYPE OF SAMPLES                              | G                                  |  |  |  |  |  |  |  |  |
| Reclaimed Wastewater Volume<br>(gallons/day) | D                                  |  |  |  |  |  |  |  |  |
| Total Coliform<br>(MPN/100 ml)               | D <sup>2/</sup>                    |  |  |  |  |  |  |  |  |
| Chlorine Residual<br>(mg/l)                  | <sup>1/2/</sup><br>2 H or<br>CONT. |  |  |  |  |  |  |  |  |
| Dissolved Sulfide                            | W                                  |  |  |  |  |  |  |  |  |
| BOD (mg/l)                                   | D                                  |  |  |  |  |  |  |  |  |
| Dissolved Oxygen                             | D                                  |  |  |  |  |  |  |  |  |

LEGEND

Type of Sample  
G = grab sample  
O = observation

Frequency of Sampling  
4H = every 4 hours  
D = daily  
W = once each week  
2W = every 2 weeks

Station  
E-001  
thru  
E-00'n' = station (s) representative of  
treatment plant effluent being  
diverted for reclamation

1/ Samples shall be taken during working hours provided all tank trucks are filled during this period of time.

2/ Samples are required to be taken only on days any reclaimed wastewater is being diverted



MONITORING SUMMARY FOR WASTEWATER RECLAMATION

DISCHARGER: NAPA SANITATION DISTRICT et.al.

ORDER NO. 77-56

| YEAR  | FLOW                          | TOTAL COLIFORM |  | CHLORINE<br>RESIDUAL  | DO                        | BOD <sub>5</sub>         | DISSOLVED<br>SULFIDE      |  |
|-------|-------------------------------|----------------|--|-----------------------|---------------------------|--------------------------|---------------------------|--|
| MONTH |                               |                |  |                       |                           |                          |                           |  |
| DAY   | TOTAL<br>GALLONS<br>RECLAIMED | MPN/100 ml     | MPN/100 ml<br>7 DAY MEDIAN<br>( MPN/100<br>ml) | mg/l DAILY<br>MINIMUM | mg/l<br>(1.0 mg/l<br>min) | mg/l<br>(60 mg/l<br>max) | mg/l<br>(0.1 mg/l<br>max) |  |
| 1     |                               |                |  |                       |                           |                          |                           |  |
| 2     |                               |                |  |                       |                           |                          |                           |  |
| 3     |                               |                |  |                       |                           |                          |                           |  |
| 4     |                               |                |  |                       |                           |                          |                           |  |
| 5     |                               |                |  |                       |                           |                          |                           |  |
| 6     |                               |                |  |                       |                           |                          |                           |  |
| 7     |                               |                |  |                       |                           |                          |                           |  |
| 8     |                               |                |  |                       |                           |                          |                           |  |
| 9     |                               |                |  |                       |                           |                          |                           |  |
| 10    |                               |                |  |                       |                           |                          |                           |  |
| 11    |                               |                |  |                       |                           |                          |                           |  |
| 12    |                               |                |  |                       |                           |                          |                           |  |
| 13    |                               |                |  |                       |                           |                          |                           |  |
| 14    |                               |                |  |                       |                           |                          |                           |  |
| 15    |                               |                |  |                       |                           |                          |                           |  |
| 16    |                               |                |  |                       |                           |                          |                           |  |
| 17    |                               |                |  |                       |                           |                          |                           |  |
| 18    |                               |                |  |                       |                           |                          |                           |  |
| 19    |                               |                |  |                       |                           |                          |                           |  |
| 20    |                               |                |  |                       |                           |                          |                           |  |
| 21    |                               |                |  |                       |                           |                          |                           |  |
| 22    |                               |                |  |                       |                           |                          |                           |  |
| 23    |                               |                |  |                       |                           |                          |                           |  |
| 24    |                               |                |  |                       |                           |                          |                           |  |
| 25    |                               |                |  |                       |                           |                          |                           |  |
| 26    |                               |                |  |                       |                           |                          |                           |  |
| 27    |                               |                |  |                       |                           |                          |                           |  |
| 28    |                               |                |  |                       |                           |                          |                           |  |
| 29    |                               |                |  |                       |                           |                          |                           |  |
| 30    |                               |                |  |                       |                           |                          |                           |  |
| 31    |                               |                |  |                       |                           |                          |                           |  |
| MIN   |                               |                |  |                       |                           |                          |                           |  |
| MAX   |                               |                |  |                       |                           |                          |                           |  |
| AVE   |                               |                |  |                       |                           |                          |                           |  |